The Pathway to EHR Adoption

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Agenda

- Introduction

- The Current HIT Environment

- The Case for EHR and HIT

- Barriers & Solutions

- The EHR Roadmap

- Issues to Consider

Who is illumisys

The health information technology division (HIT) of Lumetra

Our Mission

To assist healthcare providers in the transformation of their organizations through the adoption and use of information technology (IT)

Our Vision

To blend IT and quality to advance patient safety

HIT Goals

- **Quality of Care**
  - → Patient tracking and care planning
  - → Reduction in the risk of adverse events

- **Patient Safety**
  - → Real time and comprehensive access to patient information
  - → Decision support capabilities to enhance preventive care
  - → Automated reminders and medical alerts

HIT Goals

- **Business & Clinical Efficiencies**
  - → Centralized patient data
  - → Uniformity of data
  - → Disease reporting and population health
  - → Decrease liability issues
  - → Strengthen privacy & security of information

- **Cost Savings**
  - → Streamlined process for reporting and charting
  - → Accurate claims data
  - → Reallocation of staff time to patient focused work

- **Technical**
  - → Linkage to environmental health systems
  - → Compatible with interoperability standards

Business Case for EHR

Target EMR Benefit Areas

Quality of Care | **Patient Safety** | **Increased Efficiency** | **Cost Savings**

Specific Benefits and Implications

Higher degree of record keeping accuracy within care episode

Lab test results, EKGs, imaging scans can be entered automatically; reduces risk of data entry erros and/or missing information

Improved preventive care

Increased ability to invest more time seeing patients

Improved confidentiality, privacy, and security; access and audit trails

Restricted access to medical records based on job function

Prevention of adverse events

Tracked patient follow-up activity, patient compliance, and patient progress

Decreased of per patient time required by staff and physicians

Improved and streamlined communication

Decreased time required for common procedures, e.g. quickly prescribe medication

Efficient communication with external entities, including health plans

Savings from paper chart and transcription expenses

Potential for malpractice insurance premium savings with use of audit trails

Increased resources - space used for paper charts can be redeployed

Decreased of per patient time administrative costs and staff hours required

Business Case for EHR

Enhanced Revenue Improved Claims

Decrease Data Entry and Handling Costs

Hard Dollar **Benefits**

Increased Office Efficiency

Eliminating Paper Charts and Costs

Stretch **Benefits**

Increased Staff Satisfaction

Improved Clinical Care and Efficiency

Soft **Benefits**

Source: DOQ-IT business case presentation 2004, Mark Leavitt, HIMSS & John Weir, Lumetra

Government Support

- **State Support**
  - → Mental Health Services Act - incl. Electronic Health Record, Personal Health Record
  - → Governor's IT Executive Order
    - – E-Prescribing
   - – Health Information Exchange

- **Federal Support**
  - → Spending & Tax Incentive Legislation: Relaxation of IRS anti-kickback regulations
  - → Adoption Legislation: Assisting Doctors to Obtain Proficient and Transmissible (ADOPT) HIT Act (Gingrey 2007)
  - → New Freedom Commission on Mental Health
  - → Technology Standards - CCHIT certification & inclusion of data standards

Current Mental Health Environment

ELECTRONIC SYSTEM

June 2007
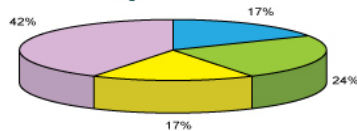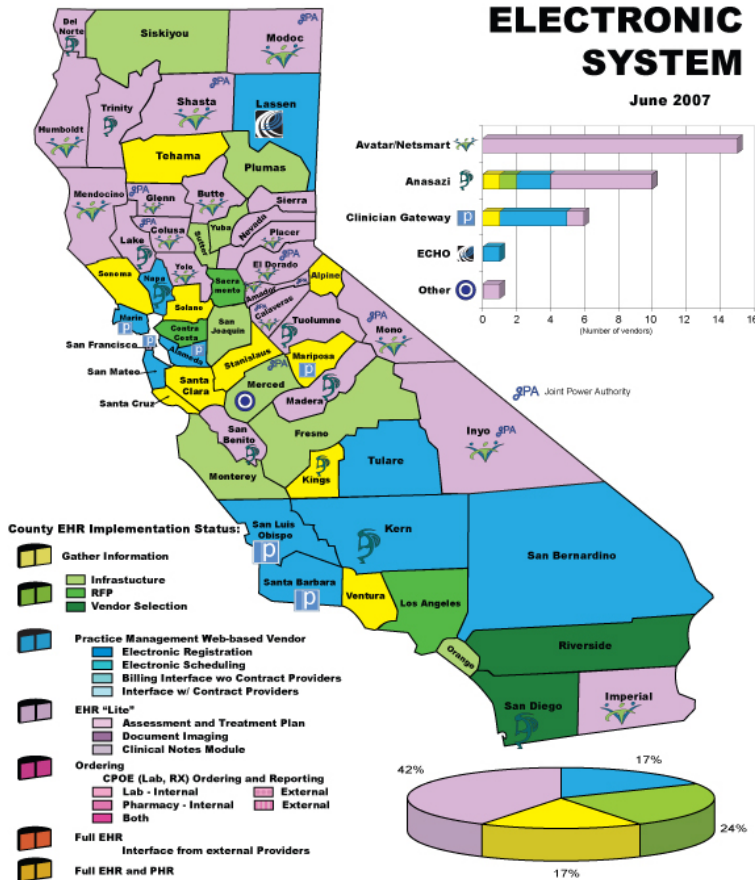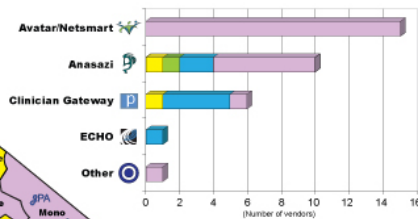
State

EHR 'Lite' Capabilities

- Assessment & Treatment Plans
- Document Imaging
- Clinical Notes

LA County

- RFP Process

Barriers to Systems Adoption

- **Financial**
  - → Costs average *$40,000 / provider over 3 years

- **Technological**
  - → Technical support
  - → Overwhelming selection process
  - → Labor-intensive customization
  - → Inadequate data exchange

- **Cultural**
  - → Leadership, staff support & competency building

- **Organizational**
  - → Workflow integration, physician-patient communications

*Source: AC Group, Market Report 2007 – includes hardware, software, implementation and training
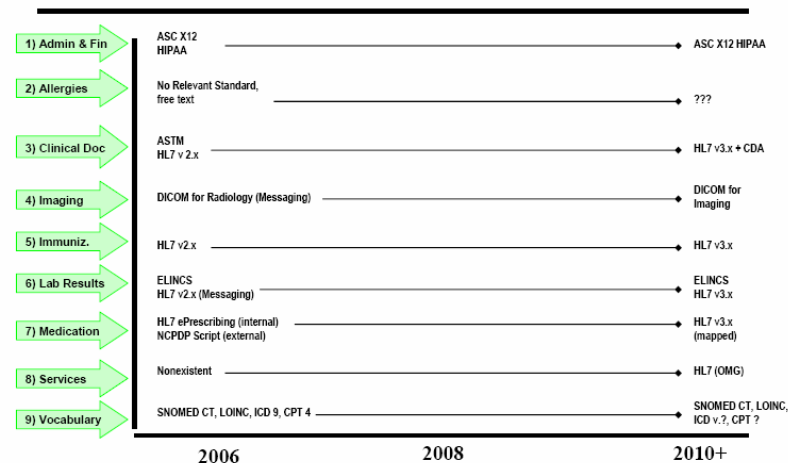
Solutions - Financial

- Avoid ALL upfront solutions

- Negotiate deliverable based milestone payments

- Lease Financing
  - → 24-60 month terms with deferral in initial 6 months

- Grants with software and hardware capabilities

- Group purchasing

*Source: AC Group, Market Report 2007 – includes hardware, software, implementation and training

Solutions - Technological

- System architectures
- System Certification
- Emergence of standards
- Product maturity & capabilities
- Access to product information
- Improved data exchange
- Security and partitioning of data

CalRHIO — California Regional Health Information Organization
Data Standards Roadmap

	2006	2008	2010+
1) Admin & Fin	ASC X12 HIPAA		ASC X12 HIPAA
2) Allergies	No Relevant Standard, free text		???
3) Clinical Doc	ASTM HL7 v 2.x		HL7 v3.x + CDA
4) Imaging	DICOM for Radiology (Messaging)		DICOM for Imaging
5) Immuniz.	HL7 v2.x		HL7 v3.x
6) Lab Results	ELINCS HL7 v2.x (Messaging)		ELINCS HL7 v3.x
7) Medication	HL7 ePrescribing (internal) NCPDP Script (external)		HL7 v3.x (mapped)
8) Services	Nonexistent		HL7 (OMG)
9) Vocabulary	SNOMED CT, LOINC, ICD 9, CPT 4		SNOMED CT, LOINC, ICD v.?, CPT ?

Solutions - Cultural

- Leadership support

- Team building

- Staff communications

- Goal orientation

- Communicate with patients & family

*Source: AC Group, Market Report 2007 – includes hardware, software, implementation and training

Solutions - Organizational

- Migration plan from paper to electronic

- Confidence with legal issues

- Staff training

- Workflow meeting facility needs

- Methods for decision support

- Accelerate research and evaluation

*Source: AC Group, Market Report 2007 – includes hardware, software, implementation and training

ehrRoadmap
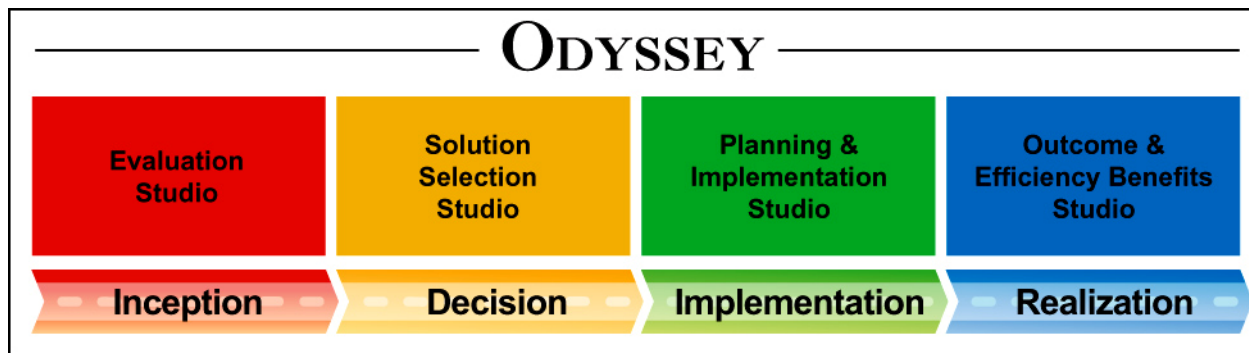
- Modular approach to assisting customers

- Results driven

- Attention to unique goals and needs

ehrRoadmap - Evaluation

ODYSSEY
Evaluation
Studio

Initiation → Decision → Implementation → Realization

- Leadership & support

- Project planning

- Readiness assessment

- Business case

- Risk assessment

- Needs analysis

ehrRoadmap - Evaluation

- Engage a decision making team
  - → Strategy development

- **Assess** your facility - know your problems – identify **risks**
  - → Lack of patient history; charting costs, lost intake sheets, chronic disease management

- Map facility **needs** to solutions
  - → Automation of lab results = Order entry and results and interface to EHR
  - → Lost charts = ubiquitous EHR access
  - → Decrease transcription costs = clinical documentation
  - → Security = User level access to sensitive data
  - → Prevention of lawsuits = Encounter histories and exception reporting

- Set **priorities** based on value proposition
  - → Clinical workflow improvement
  - → **Business Case**
  - → Job satisfaction via access to data

ehrRoadmap - Selection

- Product evaluation
- System selection tools
- Contracting

ehrRoadmap - Selection

- Workflows
  - → Build clinical scenarios & operational requirements

- Phase I - Assess vendor and product capabilities
  - → CCHIT certification (although no behavioral health specific criteria at present)
  - → Technical requirements
    - – Hardware – **Security** – User Interface – **Interoperability**
  - → Use the *'power of the web'* and existing reports for initial data (e.g. www.acgroup.com)

- Phase II – Demonstration of vendor and product capabilities
  - → Request For Proposals (RFPs)
  - → Vendor demonstrations
  - → Understand vendor support and maintenance
  - → Site visits w/mental health clients

- Phase III – Vendor Selected
  - → Final contract & price negotiation
  - → Implementation strategy development

ehrRoadmap - Implementation

ODYSSEY
Planning & Implementation Studio

Initiation → Decision → Implementation → Realization
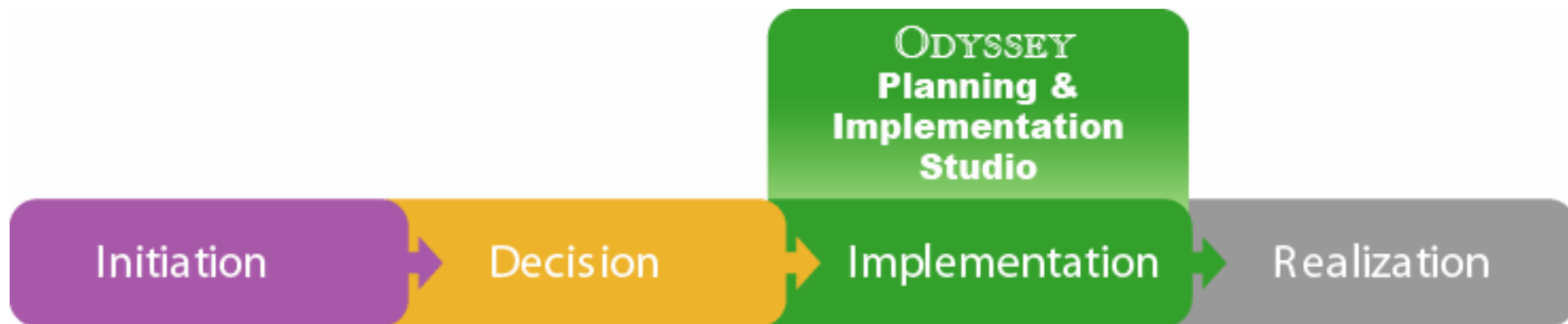
- Project planning

- System Installation & configuration

- System build & testing

- User training

- Regulatory, cultural and process considerations

- IT policy & procedure development

ehrRoadmap - Implementation

- Reasonable timeline established in project plan

- Aim for *'quick wins'* for the facility

- Develop system sustainability
    - Limit customization (map workflows efficiently and assess change in system or)
    - Have vendor **'train the trainer'**
    - Hold vendors and staff accountable
    - Hardware and software **backups**

- Interoperability
    - Lab results
    - Transcription
    - Prescribing
    - Plan for data **exchange** and referral management

- Policies & procedure development

- Reporting capabilities

- Go live strategy (facilities, users, system core functionality, fall back process)

ehrRoadmap - Implementation
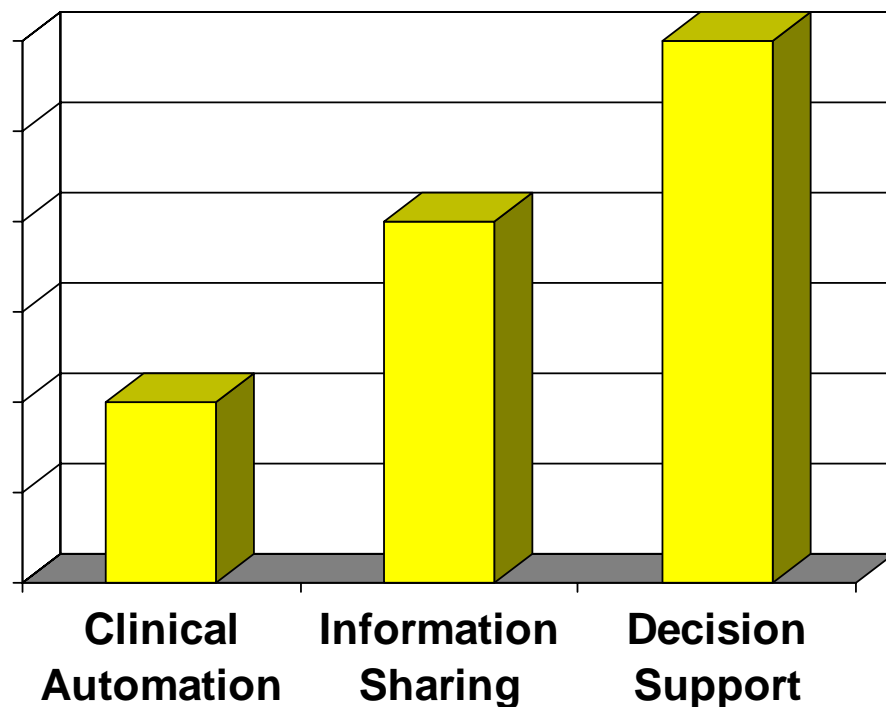
Clinical Automation

- Increased operational efficiencies & communication among providers

- Improved patient safety

Information Sharing

- Decrease administrative burden (fax, courier, mail)

- Decrease unnecessary utilization of ancillary tests

Decision Support

- Decreased medical errors and adverse drug events

- Improved patient compliance

- Decreased variability

Source: Object Health Research, Gordian Project Analysis

ehrRoadmap - Realization

- Process evaluation
- Benefits analysis
- Performance program data readiness
- Process redesign
- Workflow optimization

ehrRoadmap - Realization

- 2007 EHR System utilization is 9% - 18%

- Implement PDSA (Plan – Do – Study – Act) change methods

- Integrate evidence based decision tools

- Use reporting to identify continued goals

- Communicate goals for care improvement

- Implement and train based on changes

- Measure results

ehrRoadmap - Education

ODYSSEY
Education &
Training Studio

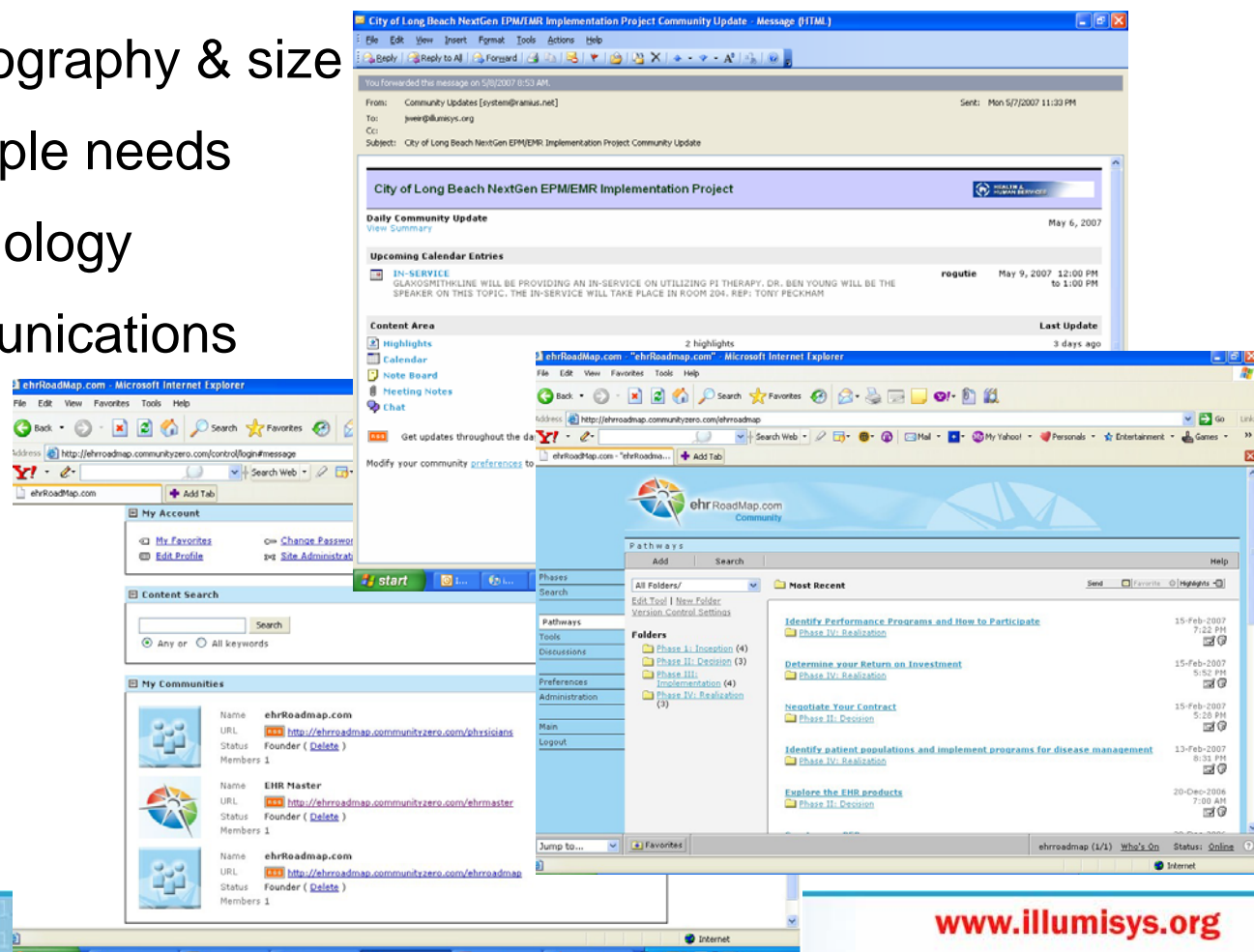Initiation   Decision   Implementation   Realization

- Train the trainer

- Tools and guidelines

- Online communities

Web Communities

- Scalable across geography & size

- Ability to meet multiple needs

- Push and pull technology

- Peer-to-peer communications

- Knowledgebase

EHR Selection & Adoption Issues

- How much information is enough?

- 'Best of breed vs. Best fit'

- Gaining consensus with team

- Start contract negotiations upfront

- Do not skip assessment

- Be a driver not a passenger

Discussion

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